

Listing of Claims:

1-30. (Canceled)

31. (Previously Presented): A method for inhibiting an immune response comprising administering to a human in need thereof a purified compound selected from the group consisting of an alpha (2) macroglobulin fragment, an alpha (2) macroglobulin receptor fragment, and an antibody specific for the alpha (2) macroglobulin receptor, which compound interferes with the interaction of a heat shock protein with the alpha (2) macroglobulin receptor, and is in an amount effective to inhibit the immune response of said human.

32-79. (Canceled)

80. (Previously Presented): The method of claim 31, wherein the heat shock protein is gp96.

81. (Previously Presented): The method of claim 31 wherein the heat shock protein is Hsp70.

82. (Previously Presented): The method of claim 31 wherein the heat shock protein is Hsp90.

83. (Canceled)

84. (Canceled)

85. (Previously Presented): The method of claim 31, wherein the immune response is to an autoimmune antigen.

86 - 90. (Canceled)

91. (Previously Presented): The method of claim 85, wherein the autoimmune antigen is of: insulin dependent diabetes mellitus, multiple sclerosis, systemic lupus erythematosus, Sjogren's syndrome, scleroderma, polymyositis, chronic active hepatitis, mixed connective tissue disease, primary biliary cirrhosis, pernicious anemia, autoimmune thyroiditis, idiopathic Addison's disease, vitiligo, gluten-sensitive enteropathy, Graves' disease, myasthenia gravis, autoimmune neutropenia, idiopathic thrombocytopenia purpura,

rheumatoid arthritis, cirrhosis, pemphigus vulgaris, autoimmune infertility, Goodpasture's disease, bullous pemphigoid, discoid lupus, ulcerative colitis, or dense deposit disease.

92. (Previously Presented): The method of claim 31, wherein the compound is said antibody specific for the alpha (2) macroglobulin receptor, said antibody being selected from the group consisting of a polyclonal antibody, monoclonal antibody, humanized antibody, chimeric antibody, single chain antibody, Fab fragment, F(ab')₂ fragment, fragment produced by a Fab expression library, and anti-idiotypic antibody.

93. (Previously Presented): The method of claim 31, wherein the compound is said antibody specific for the alpha (2) macroglobulin receptor, said antibody being an epitope-binding fragment of: a polyclonal antibody, monoclonal antibody, humanized antibody, chimeric antibody, single chain antibody, Fab fragment, F(ab')₂ fragment, fragment produced by a Fab expression library, or anti-idiotypic antibody.

94. (Previously Presented) The method of claim 31, wherein the compound is an alpha (2) macroglobulin fragment comprising at least five consecutive amino acids of alpha (2) macroglobulin (SEQ ID NO: 4).

95. (Previously Presented) The method of claim 31, wherein the compound is an alpha (2) macroglobulin fragment consisting of amino acids selected from the group consisting of: 1299-1451 (SEQ ID NO:8), 1314-1451 (SEQ ID NO:9), 1366-1392 (SEQ ID NO:10), 1300-1425 (SEQ ID NO:11), 1300-1400 (SEQ ID NO:12), 1300-1380 (SEQ ID NO:13), 1325-1425 (SEQ ID NO:14), 1325-1400 (SEQ ID NO:15), 1325-1380 (SEQ ID NO:16), 1350-1425 (SEQ ID NO:17), 1350-1400 (SEQ ID NO:18), and 1350-1380 (SEQ ID NO:19).

96. (Previously Presented) The method of claim 31, wherein the compound is an alpha (2) macroglobulin receptor fragment comprising at least five consecutive amino acids of the alpha (2) macroglobulin receptor(SEQ ID NO:7).

97. (Previously Presented) The method of claim 31, wherein the compound is an alpha (2) macroglobulin receptor fragment comprising at least one complement repeat selected from the group consisting of CR3 to CR10.

98. (Previously Presented) The method of claim 31, wherein the compound is an alpha (2) macroglobulin receptor fragment comprising a cluster of complement repeats.

99. (Previously Presented) The method of claim 98, wherein the cluster of complement repeats comprises the CI-CII complement repeat cluster of the alpha (2) macroglobulin receptor.

100. (Previously Presented) The method of claim 31, wherein the compound is an alpha (2) macroglobulin receptor fragment comprising the p80 fragment of the alpha (2) macroglobulin receptor.

101. (Previously Presented) The method of claim 31, wherein the compound is an alpha (2) macroglobulin receptor fragment consisting of amino acids selected from the group consisting of: SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, and SEQ ID NO:57.

102. (Previously Presented) The method of claim 31, wherein the compound is said antibody specific for the alpha (2) macroglobulin receptor.

103. (Previously Presented) The method of claim 31, wherein the compound is said alpha (2) macroglobulin fragment.

104. (Previously Presented) The method of claim 31, wherein the compound is said alpha (2) macroglobulin receptor fragment.

105. (Canceled)

106. (Canceled)

107. (Previously Presented) The method of claim 31, wherein the heat shock protein is calreticulin.

108. (Canceled)

109. (Canceled)

110. (Previously Presented): The method of claim 31, wherein the immune response is an autoimmune response directed at tissues or organs transplanted in said human.

111. (Previously Presented) The method of claim 103 wherein the compound is an alpha (2) macroglobulin fragment comprising at least ten consecutive amino acids of alpha (2) macroglobulin (SEQ ID NO:4).

112-114. (Canceled)

115. (Previously Presented) The method of claim 31 wherein the compound is an alpha (2) macroglobulin receptor fragment comprising at least ten consecutive amino acids of the alpha (2) macroglobulin receptor (SEQ ID NO:7).

116-120. (Canceled)

121. (Previously Presented) The method of claim 80, 81, or 107 wherein the compound is said antibody specific for the alpha (2) macroglobulin receptor.